

# Work Order ID 82145

**\*82145\***

Page 1

Friday, March 23, 2012 8:52:15 AM

Item ID: D4387-043 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Harness Assembly  
 Start Date: 3/23/2012 Start Qty: 8.00 **\*8\*** Cust Item ID:  
 Required Date: 3/30/2012 Req'd Qty: 8.00 **\*8\*** Customer:  
 Reference:

Approvals: Process Plan: *[Signature]* Date: 12-03-23 Tooling: Date: Run Start **\*NR1\***  
 QC: Date: SPC (Y/N): Date: Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4387	B

100 0.00

**\*100\*** PURCHASING  
 Purchasing Memo 0.00  
 Purchasing Issue P/O: 14544  
 P/N: 4173-2-021-2396  
 Possible supplier: Amsafe  
 Certificate of conformaty is required

12-03-23

110 0.00

**\*110\*** Receive & Inspect for Damage & Mat'l Certs 0.00  
 Packaging Memo 0.00  
 Packaging Ensure certificate of conformity is attached

*[Signature]*

120 0.00

**\*120\*** QC5- Inspect part completeness to step on W/O 0.00  
 QC Memo 0.00  
 Quality Control

*Sizbultzo*

*[Signature]*

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**- Work Order ID 82145****\*82145\***

Page 2

Friday, March 23, 2012 8:52:16 AM

Item ID: D4387-043

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Harness Assembly

Start Date: 3/23/2012 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 3/30/2012 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Run Start **\*NR1\***

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop **\*NR2\***

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

150

Identify as per dwg & Stock Location: ST

0.00

**\*150\***

Packaging

Memo

0.00

Packaging

2634/2/23 (8)

160

QC21- Final Inspection - Work Order Release

0.00

**\*160\***

QC

Memo

0.00

Quality Control

12/4/23 (8)1204-23

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

# Picklist Print

Friday, March 23, 2012 8:52:21 AM

Page 1

Work Order ID: 82145

**\*82145\***

Parent Item: D4387-043

**\*D4387-043\***

Parent Item Name: Harness Assembly

Start Date: 3/23/2012

Required Date: 3/30/2012

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP rev A 11.05.25 new issue EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
4173-2-021-2396		Purchased	No				Each	0.0000		8			
<b>*4173-2-021-2396*</b>									<b>**</b>				
4-point Restraint, Separate Shoulder Straps													

4/23/18 (e)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

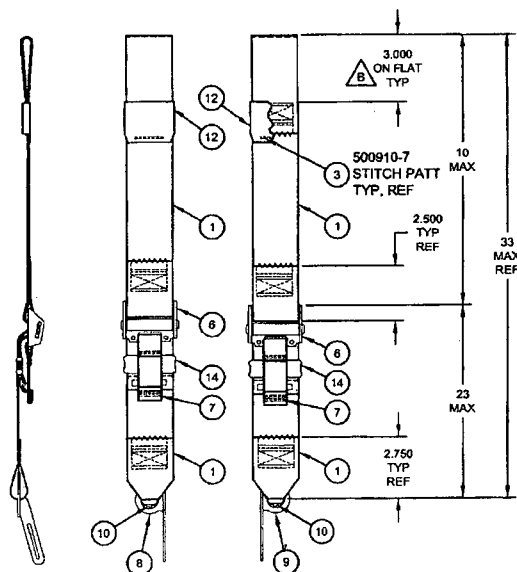
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

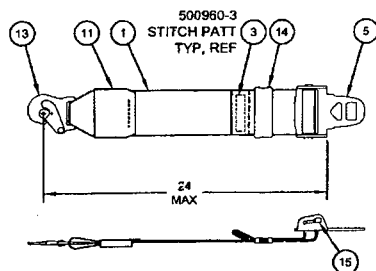
NOTE: Date & initial all entries

# **SPECIFICATION CONTROL DRAWING**

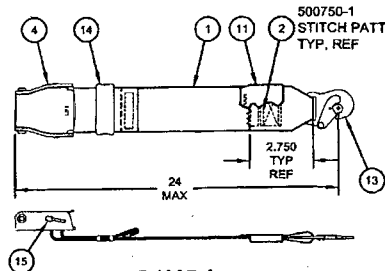


**D4387-7**

**D4387-5**



**D4387-3**



**D4387-1**

**D4387-041 HARNESS ASSEMBLY**

ITEM	QTY -041	QTY -1	QTY -3	QTY -5	QTY -7	DART P/N	DESCRIPTION	AMSAFE P/N OR MATERIAL P/N
	X					D4387-041	HARNESS ASSEMBLY	4192-1-011-2396
1	X					D4387-1	BUCKLE HALF	4192-2010112396
1			X			D4387-3	CONNECTOR HALF	4192-2030112396
1				X		D4387-5	SHOULDER STRAP	4192-2050112396
1					X	D4387-7	SHOULDER STRAP	4192-2060112396
1	A/R	A/R	A/R	A/R	A/R		WEBBING, POLYESTER	T1200-5
2	A/R	A/R	A/R	A/R	A/R		THREAD	207
3	A/R	A/R	A/R	A/R	A/R		THREAD	69
4	1						BUCKLE ASSY	502750-401
5		1					CONNECTOR ASSY	504459-417-72
6			1	1			ADJUSTER ASSY	503050-409
7				1	1		PULL TAB	500976-425
8				1	1		ADAPTER, HARNESS	505122-2-72
9				1	1		ADAPTER, HARNESS	505122-1-72
10				1	1		INSERT	AFG0568293
11	1	1					LABEL	447664
12			1	1			LABEL	447664
13	1	1					HOOK ASSY	502737-441-72
14	1	1	1	1	1		WEB SLIDE	503964-1
15	2	2					PLUG	502913

## **NOTES:**

- 1) PURCHASE: D4387-041-1/-3/-5/-7 FROM AMSAFE INC., Phoenix, AZ.
- 2) FINISH: N/A
- 3) TOLERANCES: XXX ±0.250
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: USE PLASTIC ENGRAVED TAGS AND LABEL PER FAR 21.607 TO CONTAIN THE FOLLOWING AT MINIMUM:  
MANUFACTURER P/N: 4192-1-011-2396  
CUSTOMER P/N: D4387-041  
DATE OF MFG  
CONFORMS TO FAA TSO-C114
- 7) WEIGHT: 1.75 lb
- 8) INDICATED DIMS ARE FULLY EXTENDED LENGTHS

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 82145

1012-03-23

**RELEASED**  
2011-06-16

B	3.000 TYP WAS 2.000 TYP (ZN D6-1) (REF. NCR11-644)	MB	11.06.07
A	NEW ISSUE (REF. CAR10-011)	MB	11.05.02
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	11.06.07		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D4387  
REV. B  
SHEET 1 OF 2  
SCALE  
HARNESS ASSEMBLY  
NTS

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

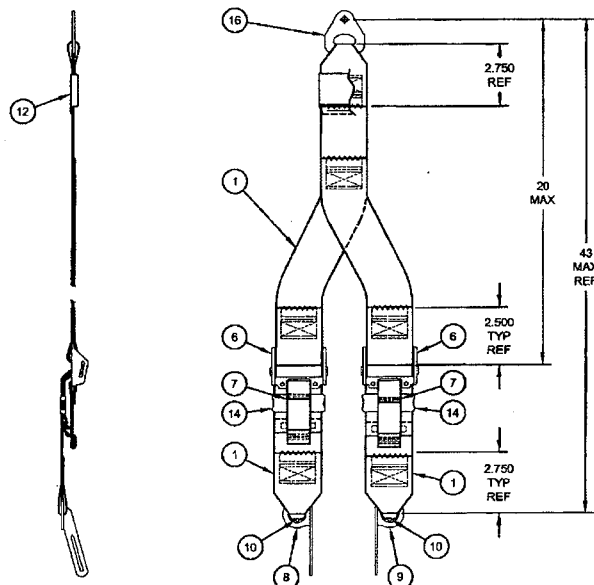
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

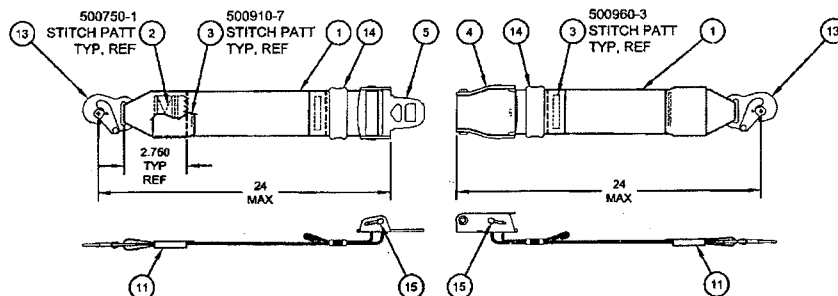
NOTE: Date & initial all entries



# SPECIFICATION CONTROL DRAWING



**D4387-9**



**D4387-13**

**D4387-11**

**D4387-043 HARNESS ASSEMBLY**

ITEM	QTY -043	QTY -9	QTY -11	QTY -13	DART P/N	DESCRIPTION	AMSAFE P/N OR MATERIAL P/N
	X				D4387-043	HARNESS ASSEMBLY	4173-2-021-2396
1		X			D4387-9	SHOULDER STRAP	4173-2110212396
1			X		D4387-11	BUCKLE HALF	4173-2070212396
1				X	D4387-13	CONNECTOR HALF	4173-2090212396
1		A/R	A/R	A/R		WEBBING, POLYESTER	T1200-5
2		A/R	A/R	A/R		THREAD	207
3		A/R	A/R	A/R		THREAD	69
4			1			BUCKLE ASSY	502750-401
5				1		CONNECTOR ASSY	504459-417-72
6		2				ADJUSTER ASSY	503050-409
7		2				PULL TAB	500978-425
8		1				ADAPTER, HARNESS	505122-2-72
9		1				ADAPTER, HARNESS	505122-1-72
10		2				INSERT	AFG0568293
11			1	1		LABEL	447864
12		1				LABEL	447864
13		2	1	1		HOOK ASSY	502737-441-72
14			1	1		WEB SLIDE	503964-1
15			2	2		PLUG	502813
16		1				END FITTING	501743-21-72

## NOTES:

- 1) PURCHASE: D4387-043/-9/-11/-13 FROM AMSAFE INC., Phoenix, AZ
- 2) FINISH: N/A
- 3) TOLERANCES: XXX  $\pm 0.250$
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: USE PLATIC ENGRAVED TAGS AND LABEL PER FAR 21.607 TO CONTAIN THE FOLLOWING AT MINIMUM:  
MANUFACTURER P/N: 4173-2-021-2396  
CUSTOMER P/N: D4387-043  
DATE OF MFG  
CONFORMS TO FAA TSO-C114
- 7) WEIGHT: 1.85 lb
- 8) INDICATED DIMS ARE FULLY EXTENDED LENGTHS

RELEASED  
2011-06-16

82145

DESIGN		<b>DART AEROSPACE LTD</b>
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. REV. B
MFG. APPR.		D4387 SHEET 2 OF 2
APPROVED		TITLE SCALE
DE APPR.		HARNESS ASSEMBLY NTS
DATE	11.06.07	COPYRIGHT © 2011 BY DART AEROSPACE LTD

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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO16544

Purchase Order Date 3/23/2012

PO Print Date 3/23/2012

Page Number 1 of 1

Order From :

VU-AMS001

AMSAFE INC.  
LOCKBOX #5  
P.O BOX 53075  
PHOENIX, AZ 85072-3075  
US

Contact Name

Vendor Phone 602 850 2850

Vendor Fax 602 850 2812

Vendor Account Nbr

Buyer

Brigitte Golden

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

USD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	4173-2-021-2396	4-point Restraint, Separate Shoulder Straps	4/20/2012 Yes	8.00 Each	FedEx PI ppd	\$221.5400	\$1,772.32
		Special Inst:	As per DWG: D4387 Rev: B B82145 AMSAFE p/n: 4173-2-021-2396				
2	4192-1-011-2396	4-point Restraint, Separate Shoulder Straps	4/20/2012 Yes	12.00 Each	FedEx PI ppd	\$221.5400	\$2,658.48
		Special Inst:	As per DWG: D4387 Rev: B B82144 AMSAFE p/n: 4192-1-011-2396				
PO Total:						\$4,430.80	

Change Nbr: 1

Change Date: 3/23/2012

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required when applicable

1. Approving National Aviation Authority/Country:  FAA/United States		2. <b>AUTHORIZED RELEASE CERTIFICATE</b> <b>FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG</b>				3. Form Tracking Number:  5230705-1-NW	
4. Organization Name and Address:  AmSafe Aviation 1043 North 47th Avenue Phoenix, Arizona 85043		Cert. No. PT1967NM				5. Work order/Contract/Invoice Number: S230705 - 1 PAGES ATTACHED	
6. Item:	7. Description:	8. Part Number:	9. Eligibility: *	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:	
1	REST SYS ASSY	4173-2-021-2396	N/A	8	N/A	NEW	
13. Remarks: Drawing: 4173 Rev: E TSO: TSO-C114  DMF: A0412							
EXPORT AIRWORTHINESS APPROVAL: THIS ARTICLE MEETS THE SPECIAL REQUIREMENTS OF CANADA							
14. Certifies the items identified above were manufactured in conformity to:  <input checked="" type="checkbox"/> Approved design data and are in a condition for safe operation  <input type="checkbox"/> Non-approved design data specified in Block 13.				19. <input type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13  Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
15. Authorized Signature: 		16. Approval/Authorization No.: ODA602112NM		20. Authorized Signature		21. Authorized/Certificate No.	
17. Name (typed or printed) Nancy Williamson		18. Date (m/d/y): APR/16/2012		22. Names (typed or printed)		23. Date (m/d/y):	
<b>User/Installer Responsibilities</b>							
<p>It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.</p> <p>Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.</p>							

# AmSafe

PHOENIX, AZ 85001  
PH (602)850-2850 FAX (602)850-2812

CUSTOMER NO.
10006113

SALES ORDER NO.
S230705

BOL NO.
000263294

DATE PRINTED
04/17/12

PAGE NO.
1

DART AEROSPACE  
1270 ABERDEEN STREET  
HAWKESBURY  
ONTARIO, CANADA K6A 1K7  
Canada

DART AEROSPACE LTD.

1270 ABERDEEN ST  
HAWKESBURY,, ON K6A 1K7  
Canada

Ship to ID: 10006125

CUSTOMER ORDER NO.
PO16544

TERMS
NET30

FREIGHT
COLLECT

SHIP VIA
FedEx Intl Priority

F.O.B.
ORIGIN

Sales Order Remarks: 1517-9324-0

Remarks:

SHIPMENT REFERENCE 000263294

LINE	ITEM NUMBER / DESCRIPTION	DRAWING AND CERTIFICATIONS	DUE DATE	QTY ORDERED	QTY SHIPPED	QTY BACK ORDERED
1	4173-2-021-2396 REST SYS ASSY	DRAWING: 4173 REV: E CERT: TSO-C114 Lot/Serial Numbers Shipped Quantity S230705-1	2012-04-18 8.0	8 Expire Ref.	8 8	0
2	4192-1-011-2396 REST SYS ASSY	DRAWING: 4192 REV: D CERT: TSO-C114 Lot/Serial Numbers Shipped Quantity S230705-2	2012-04-18 12.0	12 Expire Ref.	12 12	0

I certify that the article(s) listed above conform to all applicable design data, and (as applicable):

FAA PMA, FMVSS 209, FMVSS 302, 14 CFR 25.853

FAA TSO C22f, C22g, C114 or TSO Plus

The conditions and tests required for TSO approval of the article(s) are minimum performance standards. It is the responsibility of those installing the article(s) either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the standards applicable to the TSO article including (when applicable) the integrated non-TSO function. The non-TSO function is described as the seat belt airbag system including the inflator cable assembly and electrical components that have not been evaluated for functionality or installation requirements. TSO articles including the integrated non-TSO function must have separate approval for installation in an aircraft. The article(s) may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements. Product shipped meets all material, processing and test requirements. Certifications/Test Reports as applicable are retained on file at AmSafe Aviation.

AmSafe Authorized Signature: X

Printed Name:

Dated: / /

APR 17 2012 COUNTRY OF ORIGIN USA